ecology and environment, inc.
11 GOLDEN SHORE DR., SUITE 110, LONG BEACH, CA 90802
TELEPHONE: 310/435-6188
TELECOPIER: 310/435-6687

International Specialists in the Environment

TELECOPIER TRANSMISSION FORM

Date : 02-17-92	Time : 1047 hours
Project Charge No. : ZT1641	Total Number of Pages (Including Transmission Form) : 2
To : Dan Shane	
Location / Company : U.S. EPA, H-8-3	
Telecopier Phone No. : (415) 744-1916	
From : Robert Wise, TAT.	

Message : Work plan for King Neptune. Will meet the County & the RP on Tuesday at 0830 hours.

- o Level D: O2 <19.5% or >25%, explosive atmosphere >10% LEL, organic vapors above background levels, particulates > mg/M3, other:

- o Level C: O2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors (in breathing zone) >5 ppm, particulates >19.53 mg/M3, other: Particulates based on a maximum concentration of 128,000 ppm lead found on-site x the 50 fold protection factor for level C.

- o Level B: O2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors (in breathing zone) >500 ppm, particulates > mg/M3, other

- o Level A: O2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors >500 ppm, particulates > mg/M3, other

Air Monitoring (daily calibration unless otherwise noted)			
Contaminant of Interest	Type of Sample (area,personal)	Monitoring Equipment	Frequency of Sampling
Radiation	Area	Gieger Counter	Continuous
Particulates	Area	Mini-Ram	Continuous

Decontamination Solutions and Procedures for Equipment, Sampling Gear, etc.:

Hand auger will be decontaminated using a aqueous TSP solution wash and DI water rinse followed by a dilute nitric acid rinse and final DI water rinse. The nitric acid rinse will be applied as a fine mist. One rinsate blank will be collected from the final DI water rinse.

Personnel Decon Protocol:

Dry decon will be used

Decon Solution Monitoring Procedures, if Applicable:

Equipment decon solution will be collected and left on-site for future disposal.

Special Site Equipment, Facilities, or Procedures (Sanitary Facilities and Lighting Must Meet 29 CFR 1910.120):

Site Entry Procedures and Special Considerations:

Responsible party may be hostile.

Work Limitations (time of day, weather conditions, etc.) and Heat/Cold Stress Requirements:

General Spill Control, if Applicable:

Investigation-Derived Material Disposal (i.e., expendables, decon waste, cuttings):

All I-D waste will be double bagged and left on-site.

Sample Handling Procedures Including Protective Wear:

All sampling done on-site will be down in level C. Samples containers will be decontaminated using an aqueous TSP solution wash and DI water rinse. Personnel conducting decon will wear nitrile gloves.

Team Member*	Responsibility
Robert Wise	Team Leader
Nancy Parson	Site Safety Officer
Gerry Munoz	LACoFD Haz. Mat.

*All entries into exclusion zone require Buddy System use. All E&E field staff participate in medical monitoring program and have completed applicable training per 29 CFR 1910.120. Respiratory protection program meets requirements of 29 CFR 1910.134, and ANSI Z88.2 (1980).

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E. EMERGENCY INFORMATION

(Use supplemental sheets, if necessary)

LOCAL RESOURCES

(Obtain a local telephone book from your hotel, if possible)

Ambulance 911

Hospital Emergency Room Rio Hondo Memorial: (213) 806-1821

Poison Control Center See attached sheet

Police (include local, county sheriff, state) 911

Fire Department 911

Airport Not Applicable

Agency Contact (EPA, State, Local USCG, etc.)
Gerry Munoz (213) 744-5304

Local Laboratory Not Applicable

UPS/Fed Ex Not Applicable

Client/EPA Contact Dan Shane (415) 744-2000

Site Contact Gerry Munoz

SITE RESOURCES

Site Emergency Evacuation Alarm Method:

Water Supply Source

Telephone Location, Number

Cellular Phone, if available

Radio

Other

EMERGENCY CONTACTS

1. Dr. Raymond Harbison: (501) 221-0465 or (904) 462-3277, 3281
   (Univ. of Florida, Alachua, Fl) (501) 370-8263 (24 hours)

2. Ecology and Environment, Inc., Safety Director
   Paul Jonmaire ..... (716) 684-8060 office
   (716) 655-1260 home

3. Regional Office Contact, John Roosen .. (415) 777-2811 office
   (415) 898-5060 home

4. Los Angeles ATATL Craig Benson ..... (213) 481-3870 office
   (818) 989-0698 home

MEDTOX HOTLINE

1. Twenty-four hour answering service: (501) 370-8263

What to report:

- State: "This is an emergency."
- Your name, region, and site.
- Telephone number to reach you.
- Your location.
- Name of person injured or exposed.
- Nature of emergency.
- Action taken.

2. toxicologist, (Drs. Raymond Harbison or associate) will contact you. Repeat the information given to the answering service.

If a toxicologist does not return your call within 15 minutes, call the following persons in order until contact is made:

a. 24 hour hotline - (706) 684-8940

b. Corporate Safety Director P. Jonmaire home# (716) 655-1260

c. Asst Corp. Safety Officer S. Sherman - home# (716) 688-0084

EMERGENCY ROUTES
(NOTE: Field Team must Know Route(s) Prior to Start of Work)

Directions to hospital (include map)

Go south on Clara to Scout. Turn left onto Scout. Take Scout to Florence. Make a right turn onto Florence. Take Florence to Paramont. Make a left onto Paramount. Take Paramount to Telegraph. Make a right onto Telegraph. Rio Hondo Memorial Hospital is located at 8300 E. Telegraph Rd. Downey.

Emeregency Egress Routes to Get Off-Site

Site can be exited either through the front or back yards.

F. EQUIPMENT CHECKLIST

Level A	No
SCBA	
Spare Air Tanks	
Encapsulating Suit Type:	
Surgical Gloves	
Neoprene Safety Boots	
Booties	
Gloves, Type:	
Outer Work Gloves	
Hard Hat	
Cascade System	
5-Minute Escape Mask	

Level B	No
SCBA	
Spare Air Tanks	
Protective Coverall Type:	
Rain Suit	
Butyl Apron	
Surgical Gloves	
Gloves, Type:	
Outer Work Gloves	
Neoprene Safety Boots	
Booties	
Hard Hat w/Face Shield	
Cascade System	
Manifold System	

Level C	No
Ultra-Twin Respirator	X
Power Air Purifying Resp.	
Cartridges, Type: GMC-H	X
Protective Coverall Type: Tyvec	X
5-Minute Escape Mask	
Rain Suit	
Butyl Apron	
Surgical Gloves	X
Gloves, Type: Nitrile	X
Outer Work Gloves	
Neoprene Safety Boots	X
Hard Hat with Face Shield	X
Booties	X

Level D	No
Ultra-Twin Respirator	
Cartridges, Type:	
5-Minute Esc Mask (Avail)	
Protective Coverall Type:	
Rain Suit	
Neoprene Safety Boots	
Booties	
Work Gloves	
Hard Hat with Face Shield	
Safety Glasses	

INSTRUMENTATION	No.
OVA	
Thermal Desorber	
O2/Explosimeter & Cal Kit	
Photovac Tip	
HNu	
Magnetometer	
Pipe Locator	
Weather Station	
Draeger Pump and Tubes	
Brunton Compass	
HCN Monotox	
H2S Monotox	
Heat Stress Monitor	
Noise Equipment	
Air Sampling Pumps	
Mini-Ram	X

DECON EQUIPMENT	No.
Wash Tubs	
Buckets	X
Scrub Brushes	X
Pressurized Sprayer	X
Detergent - Type: TSP	X
Solvent - Type: Nitric Acid (dilute)	X
Plastic Sheeting	X
Tarps and Poles	
Trash Bags	X
Trash Cans	
Masking Tape	
Duct Tape	X
Paper Towels	X
Face Mask Sanitizer	
Folding Chairs	
Step Ladders	
Distilled Water	X

RADIATION EQUIPMENT	No.
Documentation Forms	
Portable Ratemeter	
Scaler/Ratemeter NaI Probe ZnS Probe GM Pancake Probe GM Side Window Probe	
Micro R Meter	X
Ion Chamber	
Alert Dosimeter	
Pocket Dosimeter	

SAMPLING EQUIPMENT	No.
Sample Jars	X
VOA Vials	
Air Sampling Pump Supplies and Collection Media Type:	
String	
Hand Bailers	
Thieving Rods	
Scoops/Trowels	X
Knives	

FIRST AID EQUIPMENT	No.
First Aid Kit	X
Oxygen Administrator	
Stretcher	
Portable Eye Wash	
Blood Pressure Monitor	
Fire Extinguisher	X

SHIPPING EQUIPMENT	No.
Coolers	X
Paint Cans w/ Lids	
Vermiculite	
Shipping Labels	X
DOT Labels	X
Strapping Tape	X
Sample Container Labels	X
Zip-Lock Baggies	X
Custody Seals	X
Chain-of-Custody Forms	X
Federal Express Forms	
Clear Packing Tape	

VEHICLE EQUIPMENT	No.
Tool Kit	
Hydraulic Jack	
Lug Wrench	
Tow Chain	
Vehicle Check-Out: Gas, Oil, Antifreeze, Battery, Tire Pressure	

MISCELLANEOUS	No.
Pitcher Pump	
Surveyor's Tape	X
100' Fiberglass Tape	
300' Nylon Rope	
Nylon String	
Surveying Flags	X
Slide Film	X
Wheel Barrow	
Bung Wrench	
Soil Auger	X
Pick	
Shovel	X
Catalytic Heater	
Propane Gas	
Banner Tape	X
Surveying Meter Stick	
Chaining Pins and Ring	
Tables	
Weather Radio	
Binoculars	
Megaphone	

OE, TECHNICAL PURE (DOT) * DODECA
OXIDE * DYP-97 F * LAUROX *
OXIDE, TECHNICALLY PURE (DOT) * LA
* LYP 97 * PEROXYDE de LAUROYL
YCH)

NSENSUS REPORTS: IARC C
: GROUP 3 IMEMDT 7,56,87;
equate Evidence IMEMDT 36,315;
d in EPA TSCA Inventory.

MAK: Mild skin effects.
Classification: Organic Peroxide
ganic Peroxide.

ETY PROFILE: Questionable can
xperimental tumorigenic data. A po
ing agent. It is a corrosive irritant
and mucous membranes and can
A dangerous fire hazard. When
omposition it emits acrid smoke

00 CAS: 93-23-2
YLISOQUINOLINIUM BROMID
$H_{32}N \cdot Br$ mw: 378.45

Deep amber, water-sol liquid; pleas
ristic odor.

-DODECYLISOQUINOLINIUM BROMIDE
SAN LQ75 * ISOTHAN

NSUS REPORTS: Reported in
ventory.

PROFILE: Poison by ingestion. A
irritant. Combustible when expo
r flame. Incompatible with oxidiz
An FDA over-the-counter d
ated to decomposition emits to
Br^- and NO_x.

CAS: 112-55-0 HR:
MERCAPTAN
$_4S$ mw: 202.44

ater-white to pale yellow liquid. M
5-177°, flash p: 262°F (OC), d: 0.8
3.5°.

DECANETHIOL * DODECYL MERCAP
ODECYL MERCAPTAN * 1-DODECYL
* n-LAURYL MERCAPTAN * t-MER
NE * NCI-C60935 * PENNFLOAT
T S

JS REPORTS: Reported in EP
tory.

REL: (n-Alkane Mono Thiols) CL 0.5
/15M

ETY PROFILE: Mutation data reported.
mbustible when exposed to heat or flame.
fire, use alcohol foam. When heated
composition it emits toxic fumes of SO_x.

CAS: 8022-15-9 HR: 1
LAVANDIN OIL

OP: Main constituent is Linalool. Prepared
steam distillation of the flowering stalks of
plants *Lavanoula hybrida reverchon*, Lavan-
ula fabrialis (Fam. *Labiatae*), *Lavandula offici-
alis*, or *Lavandula latifolia*. Yellow liquid;
camphoraceous odor of lavender. D: 0.885, refr
index: 1.460 @ 20°. Sol in fixed oils, propylene
glycol, mineral oil; insol in glycerin.

SYN: OIL of LAVANDIN, ABRIAL TYPE

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

LC0000 CAS: 8000-28-0 HR: 1
LAVENDER OIL

PROP: Found in the flowers of *Lavandula officinalis* Chaix et Villars (*Lavabdula vera* De Candolle (Fam. *Labiatae*). The main constituent is linalyl acetate. A colorless to yellow liquid; characteristic odor and taste of lavender flowers. D: 0.875, refr index: 1.459-1.470 @ 20°.

SYNS: LAVENDEL OEL (GERMAN) * OIL of LAVENDER

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

CAS: 7439-92-1 HR: 3

af: Pb aw: 207.19

PROP: Bluish-gray, soft metal. Mp: 327.43°, bp: 1740°, d: 11.34 @ 20°/4°. vap press: 1 mm @ 973°.

SYNS: C.I. 77575 * C.I. PIGMENT METAL 4 * GLOVER * LEAD FLAKE * LEAD 52 * OLOW (POLISH) * OMAHA * OMAHA & GRANT * SI * SO

CONSENSUS REPORTS: IARC Cancer Review: GROUP 2B IMEMDT 7,230,87; Animal Inadequate Evidence IMEMDT 23,325,80. Lead and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

OSHA PEL: TWA 0.05 mg(Pb)/m^3
ACGIH TLV: TWA 0.15 mg(Pb)/m^3; BEI: 50 µg(lead)/L in blood; 150 µg(lead)/g creatinine in urine.
DFG MAK: 0.1 mg/m^3; BAT: 70 µg(lead)/L in blood, 30 µg(lead)/L in blood of women less than 45 years old.
NIOSH REL: TWA (Inorganic Lead) 0.10 mg(Pb)/m^3

SAFETY PROFILE: Suspected carcinogen. Poison by ingestion. Moderately toxic by intraperitoneal route. Human systemic effects by ingestion and inhalation: loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, flaccid paralysis without anesthesia, hallucinations and distorted perceptions, muscle weakness, gastritis and liver changes. The major organ systems affected are the nervous system, blood system, and kidneys. Lead encephalopathy is accompanied by severe cerebral edema, increase in cerebral spinal fluid pressure, proliferation and swelling of endothelial cells in capillaries and arterioles, proliferation of glial cells, neuronal degeneration and areas of focal cortical necrosis in fatal cases. Experimental evidence now suggests that blood levels of lead below 10 µg/dl can have the effect of diminishing the IQ scores of children. Low levels of lead impair neurotransmission and immune system function and may increase systolic blood pressure. Reversible kidney damage can occur from acute exposure. Chronic exposure can lead to irreversible vascular schlerosis, tubular cell atrophy, interstitial fibrosis, and glomerular sclerosis. Severe toxicity can cause sterility, abortion and neonatal mortality and morbidity. Experimental teratogenic and reproductive effects. Human mutation data reported. Very heavy intoxication can sometimes be detected by formation of a dark line on the gum margins, the so-called "lead line."

When lead is ingested, much of it passes through the body unabsorbed, and is eliminated in the feces. The greater portion of the lead that is absorbed is caught by the liver and excreted, in part, in the bile. For this reason,

larger amounts of lead are necessary to cause toxic effects by this route, and a longer period of exposure is usually necessary to produce symptoms. On the other hand, upon inhalation, absorption takes place easily from the respiratory tract and symptoms tend to develop more quickly. For industry, inhalation is much more important than is ingestion. For the general population, exposure to lead occurs from inhaled air, dust of various types, and food and water with an approximate 50/50 division between inhalation and ingestion routes. Lead occurs in water in either dissolved or particulate form. At low pH, lead is more easily dissolved. Chemical treatment to soften water increases the solubility of lead. Adults absorb about 5-15% of ingested lead and retain less than 5%. Children absorb about 50% and retain about 30%.

Lead produces a brittleness of the red blood cells so that they hemolyze with but slight trauma; the hemoglobin is not affected. Due to their increased fragility, the red cells are destroyed more rapidly in the body than is normal, producing an anemia which is rarely severe. The loss of circulating red cells stimulates the production of new young cells which, on entering the blood stream, are acted upon by the circulating lead, with resultant coagulation of their basophilic material. These cells after suitable staining, are recognized as "stippled cells." There is no uniformity of opinion regarding the effect of lead on the white blood cells.

In addition to its effect on the red blood cells, lead produces a damaging effect on the organs or tissues with which it comes in contact. No specific or characteristic lesion is produced. Autopsies in deaths attributed to lead poisoning and experimental work on animals have shown pathological lesions of the kidneys, liver, male gonads, nervous system, blood vessels and other tissues. None of these changes, however, has been found consistently. In cases of severe lead poisoning, the amount of lead found in the blood is frequently in excess of 0.07 mg per 100 cc of whole blood. The urinary lead excretion generally exceeds 0.1 mg per liter of urine.

Flammable in the form of dust when exposed to heat or flame. Moderately explosive in the form of dust when exposed to heat or flame. Mixtures of hydrogen peroxide + trioxane explode on contact with lead. Rubber gloves containing lead may ignite in nitric acid. Violent reaction on ignition with chlorine trifluoride; concentrated hydrogen peroxide; ammonium nitrate (below 200° with powdered lead); [illegible] acetylide (with powdered lead). Incompat[illegible] with NaN_3; Zr; disodium acetylide; [illegible] Can react vigorously with oxidizing mat[illegible] A common air contaminant. When heat[illegible] decomposition it emits highly toxic fum[illegible] Pb.

LCG000 CAS: 301-04-2
LEAD ACETATE

DOT: UN 1616
mf: $C_4H_6O_4 \cdot Pb$ mw: 325.29

PROP: Trihydrate: colorless crystals or [illegible] granules or powder. Slily acetic odor, sl[illegible] effloresces. D: 2.55, mp: 75° (when rap[illegible] heated), decomp above 200°. Very sol in [illegible] cerol.

SYNS: ACETATE de PLOMB (FRENCH) * ACETI[illegible] ACID LEAD (2+) SALT * BLEIACETAT (GERMAN) [illegible] * DIBASIC LEAD ACETATE * LEAD (2+) ACETA[illegible] * LEAD (II) ACETATE * LEAD DIACETATE [illegible] * LEAD DIBASIC ACETATE * NORMAL LEAD AC[illegible] TATE * PLUMBOUS ACETATE * RCRA WASTE [illegible] NUMBER U144 * SALT of SATURN * SUGAR of [illegible] LEAD

CONSENSUS REPORTS: IARC Cancer [illegible] view: GROUP 3 IMEMDT 7,230,87; An[illegible] Sufficient Evidence IMEMDT 23,325[illegible] IMEMDT 1,40,72; Human Limited Evide[illegible] IMEMDT 23,325,80. NTP Fourth Annual [illegible] port On Carcinogens, 1984. Lead and its c[illegible] pounds are on the Community Right-To-Kn[illegible] List. Reported in EPA TSCA Inventory, E[illegible] Genetic Toxicology Program.

OSHA PEL: TWA 0.05 mg(Pb)/m^3
ACGIH TLV: TWA 0.15 mg(Pb)/m^3
NIOSH REL: (Inorganic Lead) TWA 0.[illegible] mg(Pb)/m^3
DOT Classification: ORM-E; Label: No[illegible] Poison B; Label: St. Andrews Cross.

SAFETY PROFILE: Confirmed carcinogen w[illegible] experimental neoplastigenic and tumorige[illegible] data. Poison by ingestion, intraperitoneal, s[illegible] cutaneous, and intravenous routes. Experim[illegible] tal teratogenic and reproductive effects. Hum[illegible] mutation data reported. Used as color addi[illegible] in hair dyes, an insecticide, an astringent, [illegible] sedative. Incompatible with $KBrO_3$, acids, so[illegible] ble sulfates, citrates, tartrates, chlorides, [illegible] bonates, alkalies, tannin phosphates, resorci[illegible] salicylic acid, phenol, chloral hydrate, sulf[illegible]